# Chaves County, New Mexico A SocioEconomic Profile



Produced by the
Sonoran Institute's
Economic Profile System

February 14, 2005

#### About The Economic Profile System (EPS)

This profile was produced using the Economic Profile System (EPS). EPS is designed to allow any user to automatically and efficiently produce a detailed socio-economic profile using the spreadsheet program Microsoft Excel. This profile contains tables and figures that illustrate long-term trends in population; employment and personal income by industry; average earnings; business development; retirement and other non-labor income; commuting patterns; and agriculture. Databases used for EPS profiles are from: Bureau of the Census, County Business Patterns, Bureau of Labor Statistics, and the Regional Economic Information System (REIS) of the Bureau of Economic Analysis, U.S. Department of Commerce.

EPS was developed in partnership with the Bureau of Land Management as a tool to assist public land managers, planners, elected officials, and citizens. EPS, databases for the entire country, the EPS User's Manual, and a PowerPoint demonstration of EPS training programs are available for free from the Sonoran Institute at: www.sonoran.org/eps

For more information about EPS or to request a community-level EPS training please contacty@sonoran.org or ben@sonoran.org.

#### About The Sonoran Institute

A nonprofit organization established in 1990, the Sonoran Institute brings diverse people together to accomplish their conservation goals.

The Sonoran Institute works with communities to conserve and restore important natural landscapes in western North America, including the wildlife and cultural values of these lands. The lasting benefits of the Sonoran Institute's work are healthy landscapes and vibrant communities that embrace conservation as an integral element of their quality of life and economic vitality.

Main Office 7650 E. Broadway Blvd., Suite 203 Tucson, Arizona 85710 (520) 290-0828

Phoenix Office 4835 E. Cactus Road Suite 270 Scottsdale, Arizona 85254 (602) 393-4310

Northwest Office 201 S. Wallace Avenue Bozeman, Montana 59715 (406) 587-7331

www.sonoran.org





Cover	
About the Sonoran Institute	
Table of Contents	
Read This First	
Demographic, Employment and Income Trends	
Demographic, Employment and Income	1
Population Trends	2
<u>Population</u>	3
Age and Gender	4
Income Distribution & Housing	5
<u>Employment</u>	6
<u>Employment</u>	7
Personal Income	8
<u>Proprietors</u>	9
Non-labor Income	10
<u>Transfer Payments</u>	11
Personal Income	12
Government Employment	13
Earnings Per Job	14
Per Capita Income	15
Firms by Industry	16
Firms by Industry in 2001 (NAICS)	17
Firms by Size	18
<u>Unemployment Trends</u>	19
<u>Commuting</u>	20
Agriculture (Business Income)	21
Relative Performance Comparisons	
Relative Performance Comparisons	22
Employment Diversity Index	23
<u>Stability</u>	24
Performance Comparisons	25
Employment and Personal Income by Industry	
Employment and Income by Industry	26
Read This First	27
Employment (SIC)	28
Employment (NAICS)	29
Personal Income (SIC)	30
Personal Income (NAICS)	31
Data Sources	Data Sources
<u>Methods</u>	Methods
Glossary	Glossary

There are two related systems for producing socioeconomic profiles: the Economic Profile System (EPS) and the Economic Profile System Community (EPSC). For best results, use both profile systems. Below is a table highlighting how the two systems complement each other.

	EPS	EPSC
Geographic level of detail	Nation Region (metro, non-metro, total) State (metro, non-metro, total) County	Nation, Region, Division, States, Counties, County Subdivisions, Places (Towns), Indian Reservations Congressional Districts
Databases used	Bureau of the Census (Census) County Business Patterns (CBP) Bureau of Labor Statistics (BLS) Bureau of Economic Analysis (BEA), Regional Economic Information System (REIS)	Bureau of the Census, Decennial Census of Population and Housing, 1990, 2000. (1990 to 2000 comparisons at the county level only)
Time series used	Continuous data from 1970 to as close to the present as possible.	2000. At the county level only 1990 to 2000 comparisons can be made to show changes in age and household income distribution.
Advantages	Long-term trend analysis; changes in employment and personal income by sector, change of businesses establishments by type and size, and non-labor sources of income, like retirement and age-related income.	Age distribution, race, housing costs, housing affordability, education rates, poverty.  Finer geographic detail.
	Counties are compared to states and nation.	Allows comparisons to user-selected 'benchmark' areas.
Disadvantages	For some counties employment and personal income data may be suppressed for some industries and for some years. EPS includes a system for estimating these data gaps, and a chapter in the EPS User's Manual profiles step-by-step instructions.	Census data is not suppressed, but it is less useful than REIS data used in EPS for long-term trends by industry; it is only available only for 2000.

#### Important notes:

- 1) Total employment figures from the Bureau of the Census (used in EPSC) and the Regional Economic Information System (used in EPS) can differ for the following reasons:
  - Census employment figures are reported by place of residence, while BEA REIS figures are by place of wo
  - BEA REIS counts all jobs, regardless of whether part-time or whether a person has several jobs. For example, if a person has three part-time jobs, they count it as three jobs.
  - In some areas seasonality may play a role: the census is taken in the spring, a shoulder season for many "resort" areas, while BEA REIS data is an annual average.
- 2) Tables and charts may be copied from Excel into any other program, like Word or PowerPoint: highlight the selection, choose copy fr the edit menu, then open Word or PowerPoint and insert by choosing "Paste Special" in the Edit Menu. We recommend that you paste charts as a picture.
- 3) EPS is updated every yearwith the latest figures.
- 4) This profile also shows business cycles, represented as vertical bars on selected charts.

The following pages (2-25) contain long-term trends in demographics, employment and income, for types of information trends in demographics, employment and income, for types of information trends in demographics, employment and income, for types of information trends in demographics, employment and income, for types of information trends in demographics, employment and income, for types of information trends in demographics, employment and income, for types of information trends in demographics, employment and income, for types of information trends in demographics, employment and income, for types of information trends in demographics, employment and income, for types of information trends in demographics, employment and income, for types of information trends in demographics, employed in the context of the context of

#### What is a 'disclosure restriction'?

A disclosure restriction means a gap exists in the data. Information has been suppressed by the U.S. Department of Commerce to avoid disclosure of confidential information. Generally, the smaller the geographic level of analysis and the smaller the population of the county, the higher the chances that industry-specific information is suppressed and that disclosure restrictions will occur.

The last section of this profile contains long-term trends on employment and personal income by industry sector (services, retail trade, manufacturing, etc.). This type of data most often has data gaps, or disclosure restrictions. EPS has a built-in system for estimating data gaps.

#### In this section you will learn about:

- 1. Changes in population, age distribution, household income distribution and housing affordability.
- 2. Comparisons of the county to the state and the nation.
- 3. Employment and income by type: proprietors versus wage and salary.
- 4. Personal income by type: labor versus non-labor income.
- 5. The role of transfer payments.
- 6. How well do we recover from recessions?
- 7. Trends in government employment.
- 8. Earnings per job versus per capita income.
- 9. Growth in firms by size and industry type.
- 10. Unemployment rates.
- 11. Cross-county flow of dollars via commuting.
- 12. Trends in agricultural businesses.

#### Highlights\*\* - In Chaves County, New Mexico:

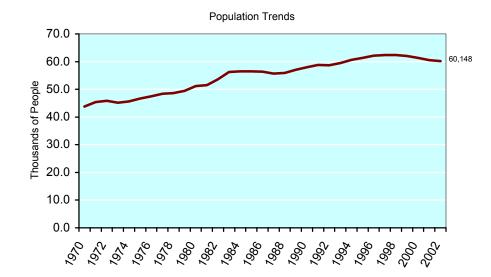
- Population Growth (1970-2002) was roughly average.
- Employment Growth (Annualized rate, 1970-2002) was roughly average.
- Personal Income Growth (Adjusted for inflation, annualized rate, 1970-2002) was roughly average.
- Non-labor Income Share of Total in 2002 was roughly average.
- Median Age\* was somewhat young.
- Per Capita Income (2002) was roughly average.
- Average Earnings Per Job (2002) was somewhat high.
- Education Rate (% of population 25 and over who have a college degree)\* was roughly average.
- Employment Specialization\* was somewhat diverse.
- Ratio Rich/Poor (Number of households that made under \$30K for every household that made over \$100K.)\* was roughly average.
- Housing Affordability (100 or above means that the median family can afford the median house.)\* was roughly average affordable.
- Government share of total employment was somewhat high.
- Unemployment Rate in 2003\*\* was somewhat high.

<sup>\*\*</sup>These highlights are based on how this area compares to the distribution of all of the counties in the United States. See the methodology sec at the end for more information.

<sup>\*</sup> from 2000 US Census \*\* from Bureau of Labor Statistics

#### **Population**

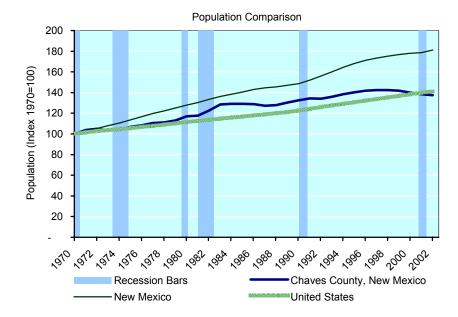
- From 1970 to 2002 population grew by 16,377 people, a 37% increase in population.
- At an annual rate, this represents an increase of 1.0%.



The vertical shaded bars on the figure below represent the last five recession periods: November 1973 to March 1975; January 1980 to July 1980; July 1981 to November 1982; July 1990 to March 1991; March 2001 to November 2001. More information about recessions is available on the next page.

#### Population Growth Compared to the State and the Nation

- Over the last 32 years population growth in Chaves County, New Mexico has been slower than the state and slower than the nation.
- Population growth is not generally impacted by national recessions.



#### How well do we recover from recessions?

An important indicator of economic performance is the ability to recover quickly from recessions.

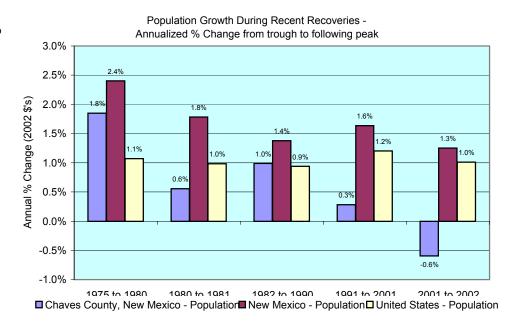
A recession is defined by the National Bureau of Economic Research as "a significant decline in activity spread across the economy, lasting more than a few months, visible in industrial production, employment, real income, and wholesale-retail sales."

The graph below shows how well we have recovered from the last five recessions. The recovery period used is from the end of one recession (the trough) to the beginning of the next recession (the peak).

This type of graph is repeated throughout the profile to show how the region recovers from recessions compared to the state and the nation.

See <a href="http://www.nber.org/cycles.html">http://www.nber.org/cycles.html</a> for more information about business cycles.

- In the latest recovery (2001 to 2002), population growth in New Mexico (up 1.3%) outpaced the United States and Chaves County, New Mexico.
- Similarly, in the last recovery (1991 to 2001), New Mexico (up 1.6%) grew the fastest.
- In the recovery from 1982 to 1990, New Mexico (up 1.4%) grew the fastest.



(From EPSC)

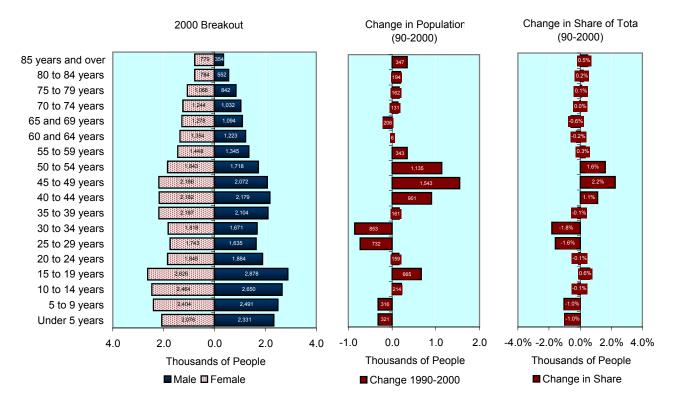
- The population has gotten older since 1990. The median age in 2000 is 35.2 years, up from 31.8 years in 1990.
- The largest age category is 15 to 19 years old the total).
- Total Population in 2000 was 61,382 people, up
- 40 54 (Baby 65 years and Median Density **Total** Under 20 years Boom in 2000) Age (Pop. per sq. mi.) Number **Number Share Number Share Number Share** Total Population 2000 19,920 32% 12,180 20% 9,025 15% 35.2 10 61,382 1990 57,849 19,678 34% 8,601 15% 8,397 15% 31.8 10 10 Yr. Change 3,579 0% 3,533 242 -2% 5% 628 3.4 1 (5,504 people or 9.0% of 10 Yr. % Change 6% 1% 42% 7% 11% 6% 2000 Sex Breakout Male 30,055 10,350 34% 5.969 20% 3.874 33.5 13% Female 31,327 9,570 31% 6,211 20% 5,151 16% 36.7 Male/Female Split 49% / 51% 52% / 48% 49% / 51% 43% / 57% 6% from 57,849 in 1990.

Population by Age and Sex

2000 Table SF1 - P12 & 1990 SF1 Table P05 & P12

 The age group that has grown the fastest, as a share of total, is 45 to 49 years, up 1,543 people. Their share of total rose by 2.2%

In the graphs below, changes in population by age are shown two ways. The "Change in Population" graph illustrates how each age bracket has changed in the last 10 years. The "Change in Share" graph illustrates how each category has changed as a share of total. Note that an age bracket can have an increase in population while declining as a share of total. The "Change in Share" graph usually demonstrates how the baby boom has caused a demographic shift in the population (growth in the 40-60 age brackets).

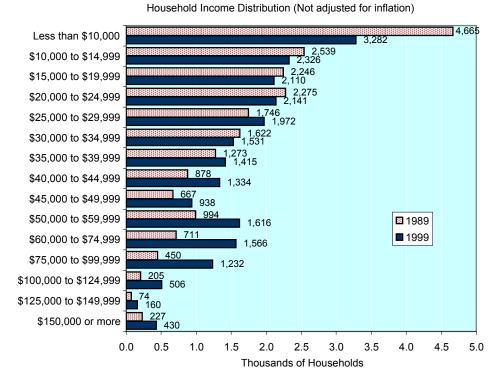


Source: Census 2000 and Census 1990

(From EPSC)

#### **Income Distribution**

- In 1999, for every household that made over \$100K, there were 10.8 households that made under \$30K. 10 years earlier, there were 26.6 households.
- Please note that the income distribution is not adjusted for inflation so some of the changes are due to inflation.



#### Housing Affordability - Owner Occupied

- The housing affordability index is 189, which suggests that the median family can afford the median house. \*
- Housing affordability has become more affordable in the last decade, from 170 in 1990 to 189 in 2000.

Owner Occupied Housing Affordability	1990	2000
Specified owner-occupied housing units: Median value (Adjusted for Ir	\$ 57,312	\$ 61,000
% of median income necessary to buy the median house	15%	13%
Income required to qualify for the median house	\$ 19,330	\$ 17,237
Housing Affordability Index: (100 or above means that the median		
family can afford the median house.)*	170	189
Universe: Specified owner-occupied housing units		SF3 - H76

Income in:	1989	1999
Per capita income		\$ 14,990
Median household income (Adj. for Inflation in 2000 \$)	\$ 28,675	\$ 28,513
Median family income (Adj.for Inflation in 2000 \$)	\$ 32,792	\$ 32,532

Universe: Total population, Households, Families

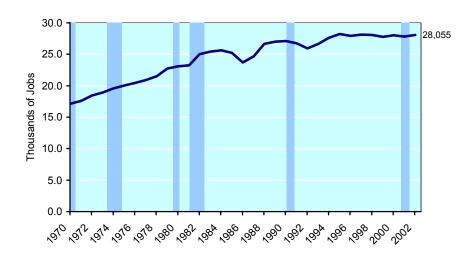
SF3 - P82.P53.P77

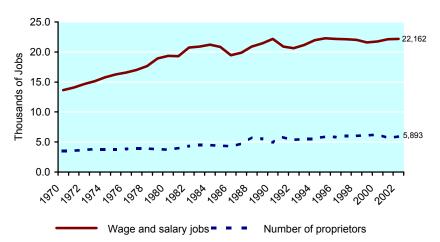
Source: Census 2000 and Census 1990

<sup>\*</sup> Note: The housing affordability figures assume a 20% down payment and that no more than 25% of a family's income goes to paying the mortgage. It is based on an interest rate of 10.01% in 1990 and 8.03 in 2000. Use this statistic as a comparative, rather than absolute, measure.

#### **Total Employment**

- From 1970 to 2002, 10,913 new jobs were created.
- From 1970 to 2002, the majority of job growth, 78% of new jobs, has been in wage and salary employment (people who work for someone else).
- Employment of proprietors contributed to 22% of new employment from 1970 to 2002, and 26% of new employment since 1992.
- In 1970, proprietors represented 21% of total employment; by 2002, they represented 21%.





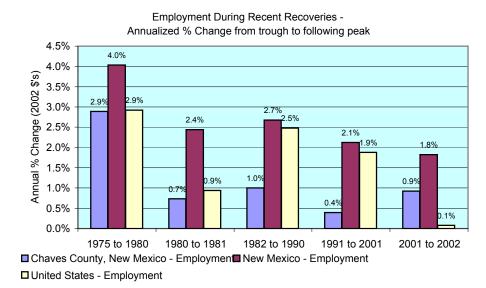
Employment by Indus Changes from 1970 to 200	_								
		0/ of			0/ <b>af</b>		% of New	_	% of New
	1970	% of Total	1992	2002		Employme nt (70-02)		nt (92-02)	Employm ent
Total full-time and part-time employment	17,142		25,951	28,055		10,913		2,104	100.0%
Wage and salary jobs	13,623	79.5%	20,611	22,162	79.0%	8,539	78.2%	1,551	73.7%
Number of proprietors	3,519	20.5%	5,340	5,893	21.0%	2,374	21.8%	553	26.3%
Number of nonfarm proprietors 5/	2,795	16.3%	4,775	5,314	18.9%	2,519	23.1%	539	25.6%
Number of farm proprietors	724	4.2%	565	579	2.1%	-145	NA	14	0.7%

**Proprietors** include sole proprietorships, partnerships, and tax-exempt cooperatives. A sole proprietorship is an unincorporated business owned by a person. A partnership is an unincorporated business association of two or more partners. A tax-exempt cooperative is a nonprofit business organization that is collectively owned by its members.

Wage and salary employment refers to employees.

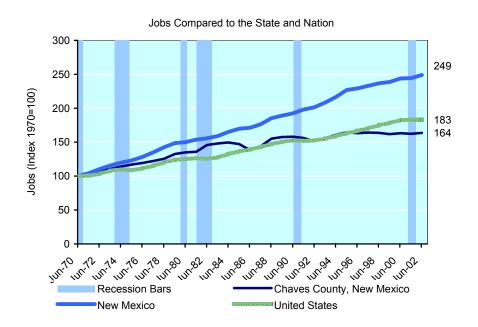
#### How well do we recover from recessions?

- In the latest recovery (2001 to 2002), employment growth in New Mexico (up 1.8%) has outpaced Chaves County, New Mexico and the United States.
- Similarly, in the last recovery (1991 to 2001), New Mexico (up 2.1%) grew the fastest.
- In the recovery from 1982 to 1990, New Mexico (up 2.7%) grew the fastest.



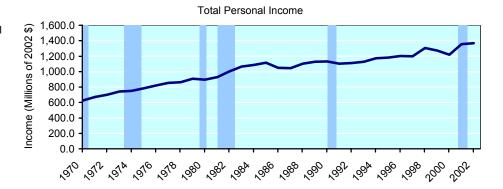
#### Job Growth Compared to the State and the Nation

- Over the last 32 years job growth in Chaves County, New Mexico has been slower than the state and slower than the nation.
- Some areas can experience employment gains even during the recessions. If so, check to see how much is due to migration and population changes.



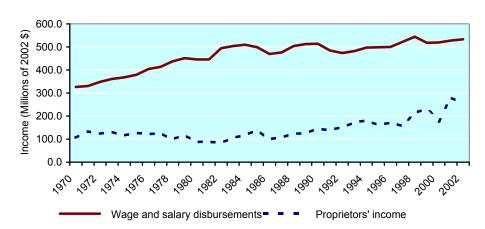
#### Long term trend

- From 1970 to 2002, personal income added \$742 million in real terms.
- The annualized growth rate was 2.5%.



#### Importance of Proprietors

- In the last 32 years, proprietors' income grew at an annual rate of 2.8%, outpacing wage and salary disbursements which grew at a 1.5% rate.
- 38.5% of new labor income from 1970 to 2002 was from proprietors' income.



Wages and Salaries v	s. Proprie	tors						
		1970		1990		2002	New	% of
		% of		% of		% of	Income	New
All income in millions of 2002 dollars	1970	Labor	1992	Labor	2002	Labor	70-02	Income
Labor Sources	434	100%	671	100%	833	100%	398	100.0%
Wage and salary disbursements	327	75%	474	71%	534	64%	207	52.0%
Proprietors' income	106	24%	151	23%	259	31%	154	38.5%
Nonfarm proprietors' income	79	18%	87	13%	156	19%	77	19.3%
Farm proprietors' income	27	6%	64	10%	103	12%	77	19.3%

Wage and salary is monetary remuneration of employees, including employee contributions to certain deferred compensation programs, suct 401(K) plans.

**Proprietors** is income of sole proprietorships, partnerships and tax-exempt cooperatives. A sole proprietorship is an unincorporated business owned by a person. A partnership is an unincorporated business association of two or more partners. A tax-exempt cooperative is a nonprofit business organization that is collectively owned by its members.

Source: BEA REIS 2002 Table CA05N and CA30

#### **Definitions:**

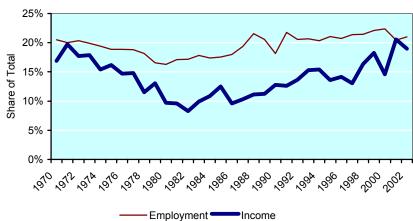
"Proprietors" refers to employment and income from sole proprietorships, partnerships, and tax-except cooperatives. "Wage and salary" refers to employees; people who work for someone else.

#### Are proprietors an important indicator of economic health?

- 1) Growth of proprietor employment and income can be a healthy sign that opportunities for entrepreneurship exist. Another way to gauge the health of small business growth is to look at changes in businesses by type and size of establishment (later in this profile).
- 2) Growth of proprietors can also mean that a rising number of people in the community want to (or need to) have side jobs in addition to their wage and salary jobs. When this is the case, earnings from second jobs can pull down average wages. To see if this is a sign of stress, look for other potential stress indictors in this profile: unemployment rates over time, changes in earnings per job.

#### Proprietors' Share of Total (Income vs. Employment)

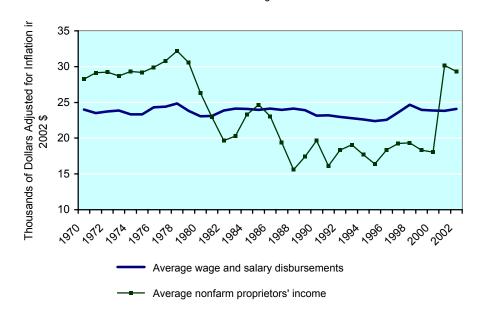
- In 2002, proprietors' share of total employment (21%) was higher than proprietors' income share of total (19%).
- From 1970 to 2002, proprietors' income share of total grew by 12.2%, while proprietors' employment share of total grew by 2.3%.



#### How are Proprietors Doing?

- From 1970 to 2002, average nonfarm proprietors' income grew at an annualized rate of 0.1% (adjusted for inflation), faster than from average wage and salary disbursements, which grew by 0.0%.
- In 2002, average nonfarm proprietors' income was \$29,299 (adjusted for inflation), more than average wage and salary disbursements (\$24,093).
- Similarly, in 1970 average nonfarm proprietors' income was \$28,251 (adjusted for inflation), more than average wage and salary disbursements (\$23,990).

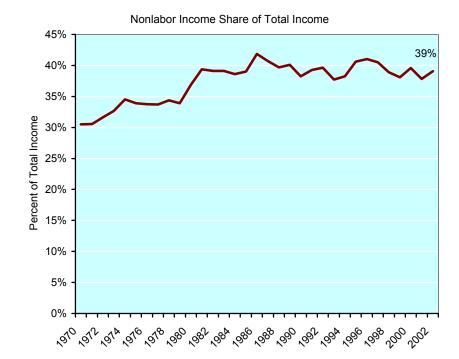
If these shares vary widely, it suggests that propreitors and wage earners have different earnings.



The term "Non-Labor Income" is also referred by some economists as "Non-Earnings Income". It consists of Dividends, Interest and Rent (collectively often referred to as money earned from investments) and Transfer Payments (payments from governments to individuals, age-related, including Medicare, disability insurance payments, and retirements).

(See methods section for definitions and further explanations.)

- In the last 32 years, nonlabor sources grew at an annual rate of 3.3%, outpacing labor sources which grew at a 2.1% rate.
- 39.1% of total personal income in 2002 was from non-labor sources.
- 46.3% of new income from 1970 to 2002 was from nonlabor sources.



Non-labor income under estimates retirement income because it does not include pensions (401K's).

or									
	1970		1992		2002	New	% of	% Chg	% Chg
	% of		% of		% of	Income	New	Ann. Rate	Ann. Rate
1970	Total	1992	Total	2002	Total	70-02	Income	70-02	92-02
625	100%	1,111	100%	1,367	100%	742	100.0%	2.5%	2.1%
434	69%	671	60%	833	61%	398	53.7%	2.1%	2.2%
191	31%	440	40%	534	39%	344	46.3%	3.3%	2.0%
119	19%	239	22%	233	17%	114	15.4%	2.1%	-0.3%
72	11%	201	18%	301	22%	230	31.0%	4.6%	4.1%
	1970 625 434 191 119	1970 % of 1970 Total 625 100% 434 69% 191 31% 119 19%	1970 % of 1970 Total 1992 625 100% 1,111 434 69% 671 191 31% 440 119 19% 239	1970     1992       % of     % of       1970     Total     1992     Total       625     100%     1,111     100%       434     69%     671     60%       191     31%     440     40%       119     19%     239     22%	1970     1992       % of     % of       1970     Total     1992     Total     2002       625     100%     1,111     100%     1,367       434     69%     671     60%     833       191     31%     440     40%     534       119     19%     239     22%     233	1970         1992         2002           % of         % of         % of           1970         Total         1992         Total         2002         Total           625         100%         1,111         100%         1,367         100%           434         69%         671         60%         833         61%           191         31%         440         40%         534         39%           119         19%         239         22%         233         17%	1970         1992         2002         New           % of         % of         lncome           1970         Total         1992         Total         2002         Total         70-02           625         100%         1,111         100%         1,367         100%         742           434         69%         671         60%         833         61%         398           191         31%         440         40%         534         39%         344           119         19%         239         22%         233         17%         114	1970         1992         2002         New         % of Income         New           1970         Total         1992         Total         2002         Total         70-02         Income           625         100%         1,111         100%         1,367         100%         742         100.0%           434         69%         671         60%         833         61%         398         53.7%           191         31%         440         40%         534         39%         344         46.3%           119         19%         239         22%         233         17%         114         15.4%	1970         1992         2002         New         % of % Chg           % of 1970         Total To

Percentages do not add to 100 because of adjustments made by BEA, such as residence, social security, and others.

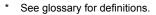
All figures in millions of 2002 dollars	1970	% of Total TP	2002	% of Total TP	New Payments 1970 to 2002	% of New Payme nts	Chang	ge in SI (1970 -	
Total transfer payments	71.6		301.3		229.7				
Government payments to individuals	66.1	92%	285.4	95%	219.4	95.5%			
Retirement & disab. insurance benefit payments	33.4	47%	106.9	35%	73.4	32.0%			
Medical payments	8.5	12%	126.7	42%	118.2	51.5%			
Income maintenance benefit payments ("welfare")	10.2	14%	35.8	12%	25.7	11.2%			
Unemployment insurance benefit payments	2.2	3%	4.8	2%	2.6	1.1%			
Veterans benefit payments	11.3	16%	9.0	3%	(2.3)	NA			
Federal educ. & trng. asst. pay. (excl. vets)	0.4	0.6%	1.3	0.4%	0.9	0.4%			
Other payments to individuals	0.1	0.2%	1.0	0.3%	0.9	0.4%			
Payments to nonprofit institutions *	3.4	5%	9.4	3%	6.0	2.6%		-	
Business payments to individuals	2.1	3%	6.4	2%	4.3	1.9%			
Age-related (Retirement, Disability & Medicare)	34.8	49%	188.0	62%	153.2	66.7%	-50%	0%	50%

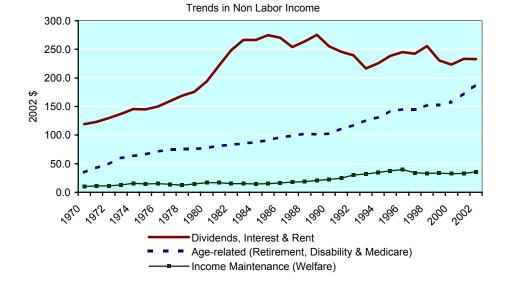
#### Trends in Non-Labor Income by Type

- The largest components of Nor Labor Income are from Dividends, Interest & Rent (i.e. money earned from past investments).
- In 2002 welfare represented 1189.6% of transfer payments, and 260.0% of total personal income. This is down from 1970 and down slightly from 1980.

## Components of Transfer Payments

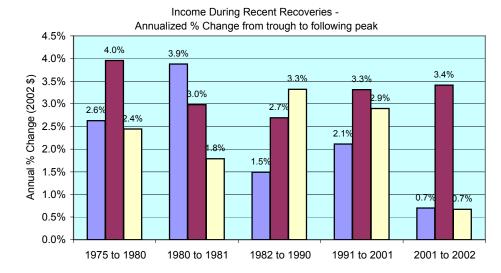
 In 2002, 62% of Transfer Payments were from agerelated sources (retirement, disability, insurance payments, and Medicare), while 12% was from welfare.





#### How well do we recover from recessions?

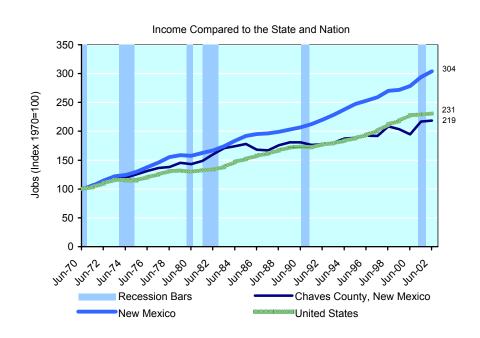
- In the latest recovery (2001 to 2002), income growth in New Mexico (up 3.4%) outpaced Chaves County, New Mexico and the United States.
- Similarly, in the last recovery (1991 to 2001), New Mexico (up 3.3%) grew the fastest.
- In the recovery from 1982 to 1990, the United States (up 3.3%) grew the fastest.



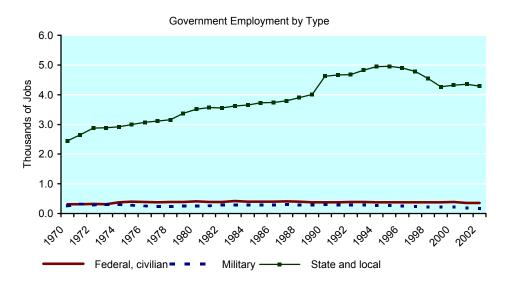
■ Chaves County, New Mexico - Income
■ New Mexico - Income
■ United States - Income

#### Income Growth Compared to the State and the Nation

- Over the last 32 years income growth has been slower than the state and slower than the nation.
- Some areas can experience income gains even during the recessions. If so, check to see how much of the change is due to changes in earnings per job, employment, migration and population changes.



 The majority of the growth in government employment has been in state and local government (102%).



Is the size of government getting bigger? One way to answer this is to look at whether government employment has grown. If so, what type of government employment, and how does it compare to population growth? The figures on this page show government employment by type.



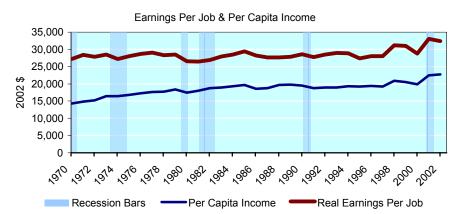
Source: BEA REIS 2002 Table CA25 and CA25N

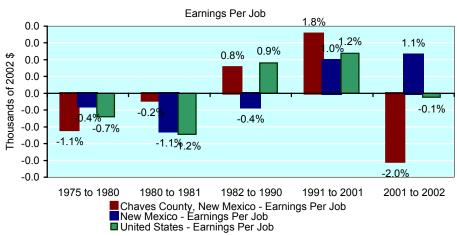
# Total Wages Earned Average Earnings per Job = ---- Total # of Workers

- Average earnings per job, adjusted for inflation, have risen from \$27,203 in 1970 to \$32,370 in 2002.
- In 2002, Average earnings per job in Chaves County, New Mexico (\$32,370) were lower than the state (\$33,461) and the nation (\$40,758).



- In the current recovery (2001 to 2002), earnings per job growth in New Mexico (up 1.1%) have outpaced the United States and Chaves County, New Mexico.
- Alternatively, in the last recovery (1991 to 2001),
   Chaves County, New Mexico (up 1.8%) grew the fastest.
- In the recovery from 1982 to 1990, the United States (up 0.9%) grew the fastest.





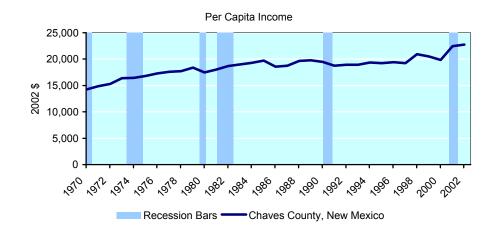
There are several reasons why earnings per job may change over time:

- 1) Average earnings per job statistics include full and part-time employment. In some counties only a portion of the eligible workforce works full-time, driving down wage statistics. Run an EPSC profile to see the percentage of people working full-time.
- 2) Communities with an increase in tourism may see a decline in earnings due to a rise in seasonal (part-time) workers.
- 3) Communities that have established themselves as regional retail trade centers may see a decline in wages due to the low wages paid in retail trade
- 4) Structural changes may have resulted in the loss of relatively high-wage occupations. Look at the long-term trends in employment, by industry, and compare to the nation and other counties. Are the changes local, or part of nation-wide trends?
- 5) More women have entered the workforce, and because of relatively lower pay, or because of fewer hours worked (depending on the region both may occur), earnings may decline over time. For a comparison of male versus female income run an EPSC profile.
- 6) Earnings will decline if job growth is primarily from low-wage services industries. Look at the breakdown of different industrial sectors to see the type of service industries that are growing. Does the community have what it takes (education, airports, amenities, etc.) to attract the highwage service industries (engineering, finance, etc.)?
- 7) People may be choosing to live in some communities for quality of life reasons. In some areas the increase in population can outpace the rate of job creation, thereby flooding the labor market and causing a downturn in wages. Look at the growth rates of population relative to growth in jobs and personal income.

**Per capita income** is often used as a measure of economic performance, but it should be combined with changes in earnings for a realistic picture of economic health:

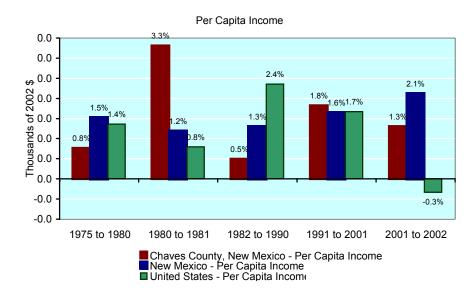
Since total personal income includes income from 401(k) plans as well as other non-labor income sources like transfer payment, dividends, and rent, it is possible for per capita income to rise, even if the average wage per job declines over time. In other words, the non-labor sources of income can cause per capita income to rise, even if people are earning less per job.

- Per capita income, adjusted for inflation, has risen from \$14,281 in 1970 to \$22,727 in 2002.
- In 2002, per capita income in Chaves County, New Mexico (\$22,727) was lower than the state (\$24,823) and the nation (\$30,906).



#### How well do we recover from recessions?

- In the current recovery (2001 to 2002), per capita income growth in New Mexico (up 2.1%) has outpaced Chaves County, New Mexico and the United States.
- Alternatively, in the last recovery (1991 to 2001), Chaves County, New Mexico (up 1.8%) grew the fastest
- In the recovery from 1982 to 1990, the United States (up 2.4%) grew the fastest.



The advantage of this data source is that it never has disclosure restrictions. This source also releases data for hundreds of sectors (available on demand). The data on this page are from the US Census County Business Patterns, which unlike the REIS data, does NOT include proprietors, government, household services or railroad workers. If available, we encourage you to look at employment and income data from BEA REIS starting on page 26 as well.

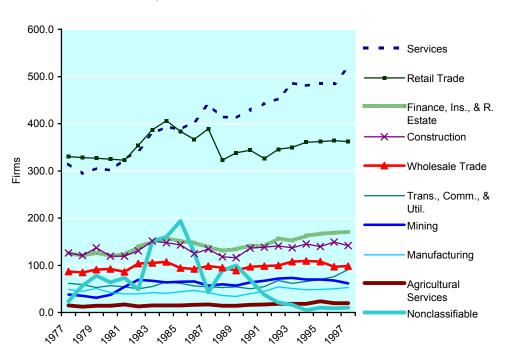
#### Growth

 The employment category whose share of total gained the most was services, which went from 26.9% in 1977 to 33.9% in 1997.

#### Decline

 The category whose share of total shrank the most was retail trade, which went from 28.2% in 1977 to 23.7% in 1997.

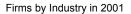
#### County Business Patterns Number of Establishments

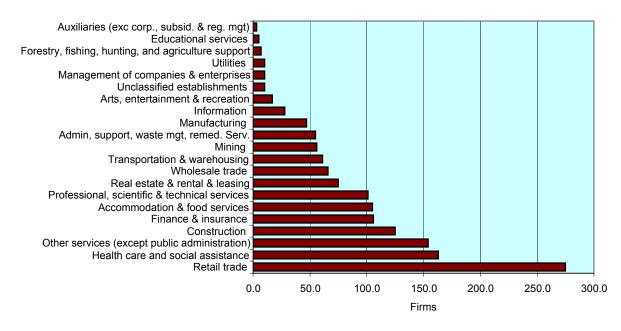


							New	Firms	Change in	Share
	1977 \$	Shr of Tot	1987 S	Shr of Tot	1997	Shr of Tot	77-97	Shr of Tot	of Tota	al
Total	1172		1413		1527		355			
Agricultural Services	15	1.3%	17	1.2%	20	1.3%	5	1.4%		
Mining	38	3.2%	57	4.0%	62	4.1%	24	6.8%		
Construction	126	10.8%	134	9.5%	142	9.3%	16	4.5%		
Manufacturing	49	4.2%	42	3.0%	53	3.5%	4	1.1%		
Trans., Comm., & Util.	62	7.4%	54	6.9%	91	6.4%	11	3.1%		
Wholesale Trade	87	7.4%	98	6.9%	98	6.4%	11	3.1%		
Retail Trade	330	28.2%	389	27.5%	362	23.7%	32	9.0%		
Finance, Ins., & R. Estate	126	10.8%	138	9.8%	171	11.2%	45	12.7%		
Services	315	26.9%	441	31.2%	518	33.9%	203	57.2%		
Nonclassifiable	24	2.0%	43	3.0%	10	0.7%	-14	NA		
									-10% 0%	10%

Data ends in 1997 because the CBP switched to a different classification system (NAICS) in 1997.

**Source: Census County Business Patterns** 





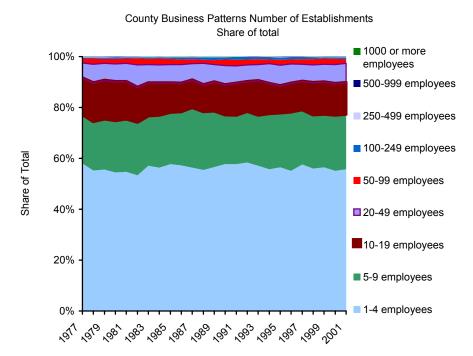
Firms by size and industry in 2001

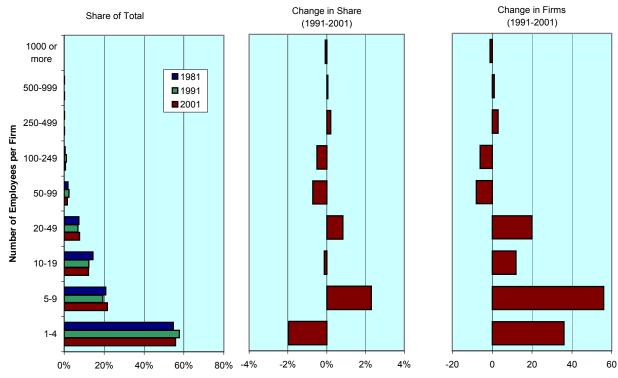
				Number	of Empl	oyees pe	r Firm			
	Total	1-4	5-9	10-19	20-49	50-99	100- 249	250- 499	500- <sup>-</sup> 999	1000 or more
Forestry, fishing, hunting, and agriculture sur	7	6	1	0	0	0	0	0	0	0
Mining	56	39	8	8	1	0	0	0	0	0
Utilities	10	8	0	0	1	1	0	0	0	0
Construction	125	78	25	15	5	0	2	0	0	0
Manufacturing	47	18	9	8	6	2	0	3	1	0
Wholesale trade	66	30	15	14	6	1	0	0	0	0
Retail trade	275	127	84	37	22	3	2	0	0	0
Transportation & warehousing	61	36	11	8	5	1	0	0	0	0
Information	28	11	9	4	3	1	0	0	0	0
Finance & insurance	106	73	20	9	2	2	0	0	0	0
Real estate & rental & leasing	75	59	13	2	1	0	0	0	0	0
Professional, scientific & technical services	101	71	14	9	6	1	0	0	0	0
Management of companies & enterprises	10	2	2	4	2	0	0	0	0	0
Admin, support, waste mgt, remed. Serv.	55	35	7	8	2	2	1	0	0	0
Educational services	5	3	2	0	0	0	0	0	0	0
Health care and social assistance	163	81	42	20	12	3	4	0	1	0
Arts, entertainment & recreation	17	12	0	1	4	0	0	0	0	0
Accommodation & food services	105	24	27	20	27	6	1	0	0	0
Other services (except public administration)	154	99	32	13	9	1	0	0	0	0
Auxiliaries (exc corp., subsid. & reg. mgt)	3	3	0	0	0	0	0	0	0	0
Unclassified establishments	10	10	0	0	0	0	0	0	0	0
Total	1479	825	321	180	114	24	10	3	2	0

Source: Census County Business Patterns

#### Firms by Size

- The size category that grew the most was 5-9 employees.
- As a share of total, the size category that gained the most was 5-9 employees.
- In 2001, 90% of the firms had fewer than 20 employees.

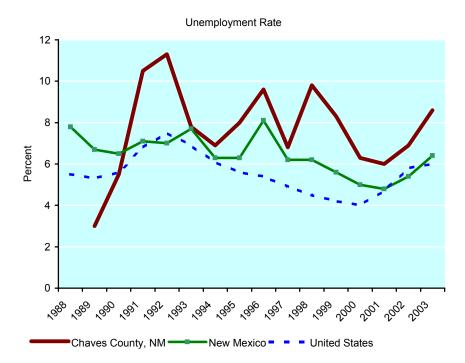




**Source: Census County Business Patterns** 

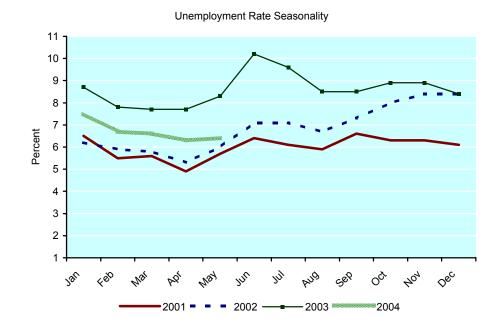
#### Annual Average Unemployment Rate Compared to the State and the Nation

 In 2003, the unemployment rate was 8.6%, compared to 6.4% in the state and 6.0% in the nation.



#### **Unemployment Rate Seasonality**

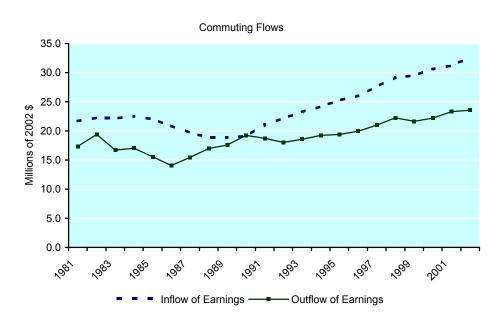
This graph illustrates the seasonal variation in the unemployment rate over the last three years. In 2003, the unemployment rate varied from from a low of 7.7% in April 2003 to a high of 10.2% in June 2003



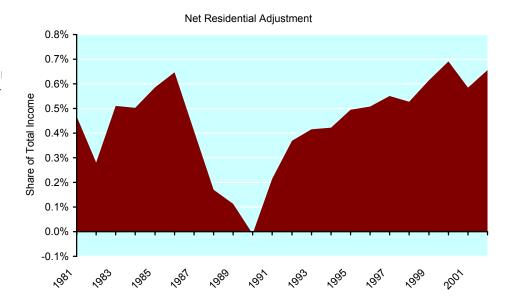
Source: Bureau of Labor Statistics

#### Inflow & Outflows

 Commuting data suggests that Chaves County, New Mexico is a bedroom community. (Income derived from people commuting out of the county exceeds the income from people commuting into the county.) The net difference represents 0.7% of total income in the county.



 A positive Net Residential Adjustment indicates outcommuting for work to adjacent counties.



The Bureau of Economic Analysis (BEA) reports personal income in terms of location of residence. BEA calculates how much money is earned in the county by people living outside the county (Total Gross Earnings Outflow) and it calculates how much money is brought into the county residents who work outside of the county (Total Gross Earnings Inflow). Subtracting one from the other gives the Net Residence Adjustment. The Inflow and Outflow Trends indicate whether the county is closely tied to others in terms of commuting.

Farm income figures presented on this page reflect income from farming interprises (income of the business). The term "farm" includes farming and ranching, but not agricultural services such as soil preparation services and veterinary services. In contrast, farm income figure presented in the next section reflect personal income earned bindividuals (income of individuals, both proprietors and wage and salary employees) who work in farming and ranching.

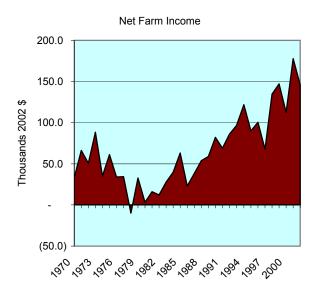
Farm income of businesses differs from individual farm income because it also includes government payments, rent, the value of inventory change and production expenses. In some areas, net farm income can be negative when production expenses exceed gross income.

Gross Income, Expenses, a	nd Net In	come f	rom Far	ming a	nd Ranc	hing	
		% of		% of		% of	70-02
		Gross		Gross		Gross	Change in
All figures in thousands of 2002 dollars	1970	Income	1992	Income	2002	Income	Share
Gross Income (Cash + Other)	396,902		245,592		352,152		
Cash Receipts from Marketings	377,484	95%	233,493	95%	338,534	96.1%	1%
Livestock & Products	334,628	84%	186,828	76%	285,338	81.0%	-3%
Crops	42,856	11%	46,665	19%	53,196	15.1%	4%
Other Income	19,418	5%	12,099	5%	13,618	3.9%	-1%
Government Payments	17,471	4%	7,495	3%	4,338	1.2%	-3%
Imputed Rent & Rent Received	1,947	0%	4,605	2%	9,280	2.6%	2%
Production Expenses	329,004		158,316		206,983		
Realized Net Income (Income - Expenses)	67,898		87,277		145,169		
Value of Inventory Change	(34,473)	-9%	(1,103)	0%	874	0.2%	NA
Total Net Income (Inc. corporate farms)	33,425		86,174		146,043		

#### Gross Income vs. Production Expenses

# Gross Income vs. Production Expenses 700.0 600.0 400.0 200.0 100.0 Gross income Production expenses

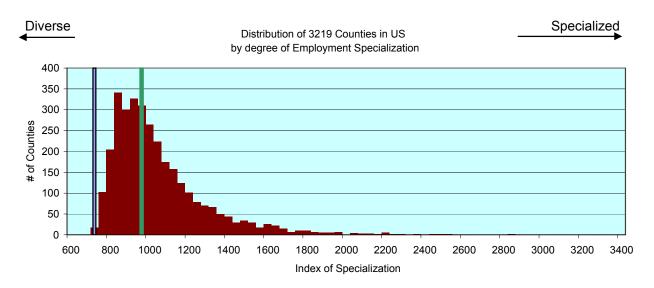
#### **Net Farm Income**



#### In the following pages (23-25) you will learn about:

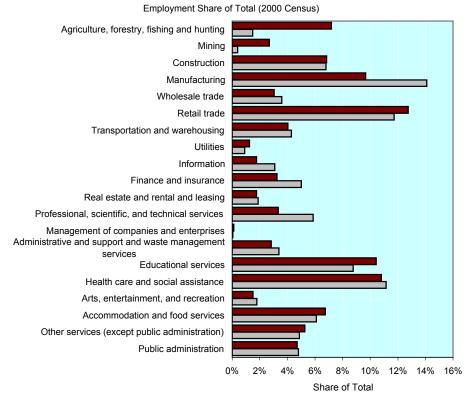
- 1. The economic diversity of the county, compared to the state and the nation.
- 2. The year to year stability of personal income growth, comparing the county to the state and the nation.
- 3. The stability of personal income over time, comparing labor versus non-labor income.
- 4. If this is a county profile, numerous performance characteristics of the county (population growth, employment growth, employment stability, etc.), are used to compare the county to the median county in the country (a "benchmark").

One measure of economic success is economic diversity, or the lack of specialization. Communities that are heavily reliant on only a few industries are economically vulnerable to disruptions. This page documents one measure of specialization based on employment data from the 2000 Census.



■ County Distribution ■ Chaves County, New Mexico = 748 Median = 961

- The above chart illustrates how this county compares to all of the other counties in the nation. Each bar represents the number of counties that have a index of specialization in that range. The green vertical line illustrates the value for the mean. As you can see, most counties are similar, but there are a few counties that are wildly specialized (the long tail on the right).
- Chaves County, New Mexico is somewhat diverse (748 versus a median of 961 for the US counties.)
- The chart to the right illustrates the data on which the index is based employment share of total from the 2000 Census. There are more timely breakouts by industry from a different data source later in the profile.

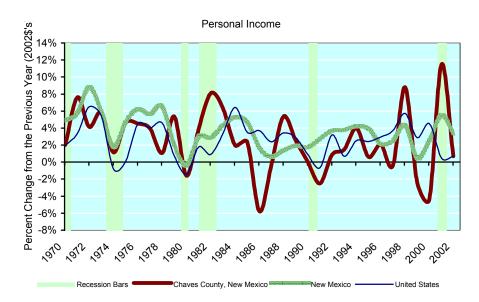


■ Chaves County, New Mexico ■ United States

Source: Census 2000 SF3 Table P49.

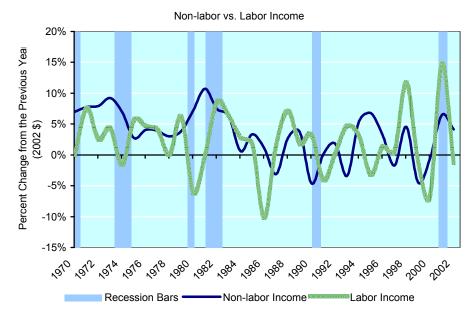
#### Stability vs. State and Nation

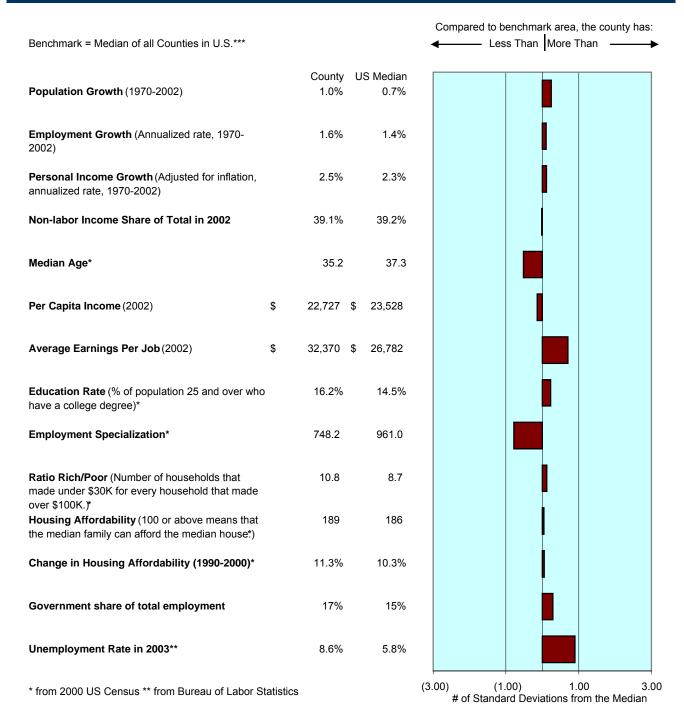
- Different regions can behave very differently during recessions and recoveries.
- Note: Below 0% means absolute decline. Above 0% means absolute growth, but at different rates.



#### Labor vs. Non-Labor Income Stability

 Non-labor income sources can have a stabilizing effect on the economy and are sometimes, but not always, counter-cyclical to labor income.





<sup>\*\*\*</sup>Median is the middle value of a list of numbers. This is different from mean (average), which is the sum of all the numbers in a list divided by the number of numbers in the list.

#### **Employment and Income by Industry**

#### In the following pages (28-30) you will learn about:

- 1. Employment and personal income trends, from 1970 to 2002
- 2. How the structure of the economy has changed during the last three decades

Information for some industries and for some years may not be available from the U.S. Department of Commerce because of disclosure restrictions.

#### What is a 'disclosure restriction'?

A disclosure restriction means a gap exists in the data. Information has been suppressed by the U.S. Department of Commerce to avoid disclosure of confidential information. Generally, the smaller the geographic level of analysis and the smaller the population of the county, the higher the chances that industry-specific information is suppressed and that disclosure restrictions will occur.

EPS has a built-in system for estimating the data gaps that allows the user to choose from the following techniques to fill in data gaps:

- Use different sources of data (e.g. County Business Patterns instead of the Department of Commerce's Regional Economic
- Information System BEA REIS)
- Subtract all known rows of data from total to locate the missing row
- Apply the percent change from previous year using County Business Patterns data
- Extend the recent growth rate
- Use least squares technique to forecast a trend line
- · Apply a straight line to the gap
- · Apply constant share of total
- Decide on a larger geographic level of analysis
- Do nothing and leave the data gap.

Whenever data has been estimated using one of these techniques, it will be noted in a footnote at the bottom of the page, and the data cell will be shaded in gray.

#### Important Notes on the Industrial Classification Systems used by EPS

The U.S. Department of Commerce made a transition in how economic information is gathered and organized. The Standard Industrial Classification System (SIC) was used from 1970 to 2000; the North American Industrial Classification System (NAICS, pronounced "nakes") is used currently, for data from 2001 and beyond.

Unfortunately the two systems are not backward comparable, so they are presented separately in EPS: 1970 to 2000 data are organized by SIC, and data beyond those years are organized by NAICS.

The most important change resulting from the shift to NAICS is the recognition of hundreds of new businesses in today's economy. NAICS divides the economy into 20 broad sectors rather than the SIC's 10 divisions. This is especially helpful in giving a more detailed breakdown of the fastest growth area in the country's economy – "services." For example, advanced technology related "service" industries (e.g., professional, scientific and technical services) are clearly differentiated from "inperson" services (e.g., health care) and low-wage services (e.g., accommodation and food services).

For historical data (1970-2000, organized by SIC) EPS was designed to illustrate the complexity of the service economy in a couple of ways:

- We use the term "Services and Professional" to underscore an important point: service occupations are not just "hamburger flippers and maids," but rather consist of a combination of high-paying and low-paying professions, mixing physicians with barbers, and chambermaids with architects and financial consultants.
- We reorganized the SIC categories into different types of services, such as Consumer Services, Producer Services, Social Services, and Government Services.

The transition to NAICS has alleviated the need to explain that "services" are actually a wide mix of low, medium, and high-wage industries.

#### **About Missing Data**

This profile is organized so that all non-disclosed information is presented first. Employment and personal income by indus is presented last. For some rural counties, and for some industries, data gaps may be estimated using a variety of techniques.

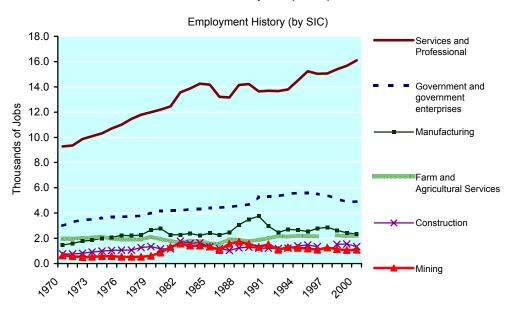
Data ends in 2000 because the BEA switched to a different classification system (NAICS) in 2001.

#### Growth

 The employment category whose share of total gained the most was services (health, legal, business, others), which went from 18.9% in 1970 to 24.7% in 2000.

#### Decline

 The category whose share of total shrank the most was farm, which went from 10.2% in 1970 to 5.6% in 2000.



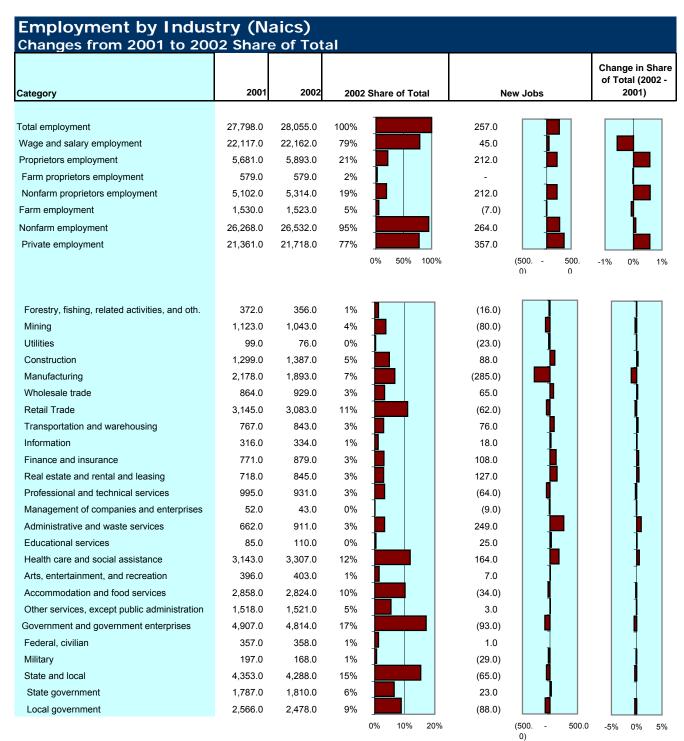
	1970	% of Total	2000	% of Total	New E	mployment	% of New Employm ent	Change i Shar
Total Employment	17,142		28,017		10,875			
Wage and Salary Employment	13,623	79.5%	21,754	77.6%	8,131		74.8%	
Proprietors' Employment	3,519	20.5%	6,263	22.4%	2,744		25.2%	
Farm and Agricultural Services	1,975	11.5%	2,204	7.9%	229		2.1%	
Farm	1,745	10.2%	1,561	5.6%	-184		NA	
Ag. Services	230	1.3%	643	2.3%	413		3.8%	
Mining	639	3.7%	1,094	3.9%	455		4.2%	
Manufacturing (incl. forest products)	1,468	8.6%	2,342	8.4%	874	<u> </u>	8.0%	
Services and Professional	9,289	54.2%	16,104	57.5%	6,815		62.7%	
Transportation & Public Utilities	1,069	6.2%	926	3.3%	-143		NA	
Wholesale Trade	604	3.5%	995	3.6%	391		3.6%	
Retail Trade	3,015	17.6%	5,608	20.0%	2,593		23.8%	
Finance, Insurance & Real Estate	1,368	8.0%	1,642	5.9%	274		2.5%	
Services (Health, Legal, Business, Others)	3,233	18.9%	6,933	24.7%	3,700		34.0%	
Construction	768	4.5%	1,351	4.8%	583		5.4%	
Government	3,003	17.5%	4,922	17.6%	1,919	-5,0 0 5,00 10,0	17.6%	

**Agricultural Services** include soil preparation services, crop services, etc. It also includes forestry services, such as reforestation services, and fishing, hunting and trapping. **Manufacturing** includes paper, lumber and wood products manufacturing.

#### Growth

#### Decline

- The employment category whose share of total gained the most was administrative and waste services, which went from 2.4% in 2001 to 3.2% in 2002.
- The employment category whose share of total shrank the most was manufacturing, which went from 7.8% in 2001 to 6.7% in 2002.



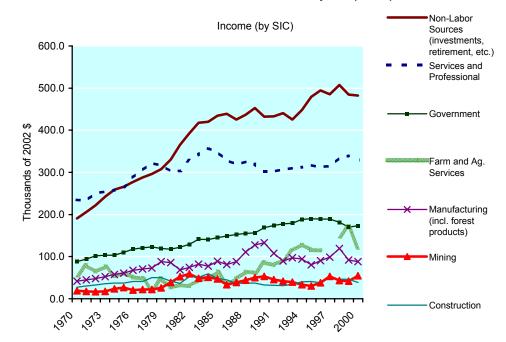
Data ends in 2000 because the BEA switched to a different classification system (NAICS) in 2001.

#### Growth

 The income category whose share of total gained the most was transfer payments, which went from 11.5% in 1970 to 21.2% in 2000.

#### Decline

 The category whose share of total shrank the most was services and professional, which went from 37.6% in 1970 to 27.1% in 2000.



All figures in millions of 2000 dollars	1970	% of Total	2000	% of Total	New Income	1970 to 2000	% of New Income	Change in Share
Total Personal Income*	625		1,218		592			
Farm and Agricultural Services	56	8.9%	121	9.9%	65		11%	
Farm	48	7.7%	104	8.6%	56		9%	
Ag. Services	7.2	1.2%	16.5	1.4%	9		2%	
Mining	19.0	3.0%	54.8	4.5%	36		6%	
Manufacturing (incl. forest products)	41	6.6%	88	7.3%	47		8%	
Services and Professional	235	37.6%	330	27.1%	95		16%	
Transportation & Public Utilities	40	6.4%	34	2.8%	-7		NA	
Wholesale Trade	26	4.2%	28	2.3%	2		0%	
Retail Trade	70	11.2%	91	7.5%	21		4%	
Finance, Insurance & Real Estate	26	4.2%	29	2.4%	2		0%	
Services (Health, Legal, Business, Oth.)	72	11.4%	148	12.2%	76		13%	
Construction	27	4.4%	39	3.2%	11		2%	
Government	88	14.1%	174	14.3%	86		14%	
Non-Labor Income	191	30.5%	482	39.6%	291		49%	
Dividends, Interest & Rent	119	19.1%	224	18.4%	104		18%	
Transfer Payments	72	11.5%	259	21.2%	187		32%	

<sup>\*</sup>The sum of the above categories do not add to total due to adjustments made for place of residence and personal contributions for social insurance made by the U.S. Department of Commerce.

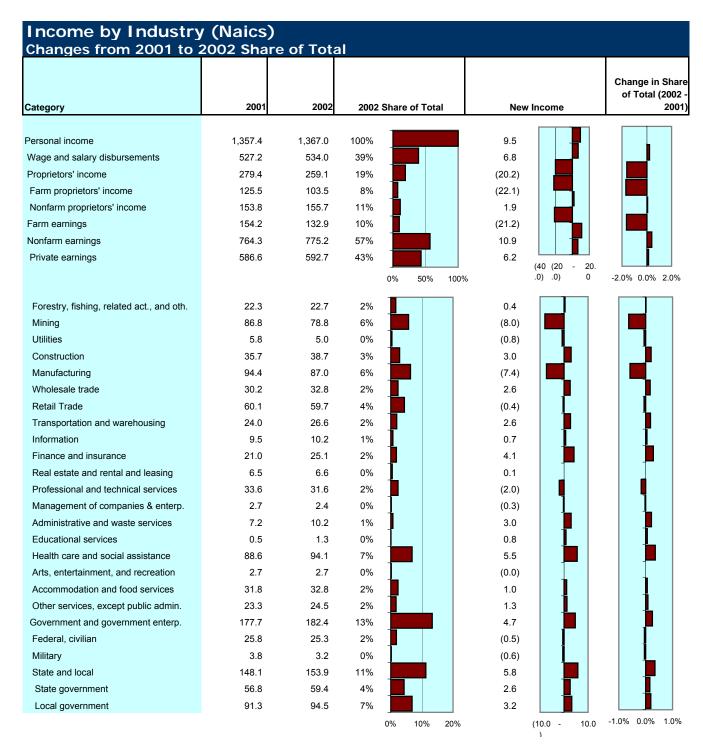
#### Personal Income (NAICS)

#### Growth

 The income category whose share of total gained the most was health care and social assistance, which went from 6.5% in 2001 to 6.9% in 2002.

#### **Decline**

 The income category whose share of total shrank the most was mining, which went from 6.4% in 2001 to 5.8% in 2002.



### Personal Income (NAICS)

color high wage green (over	2001	2002	2002 Share	New Income	New Income Share	Gallatin Change in Share (2002 - 2001 Share)
red is under 382	1					,
Personal income	1,357.4	1,367.0	100%	9.5	100%	0.0%
Page Under Cons	struction	- Disrea	ard Data			
Farm and Ag (includes forestry			0%	_	0%	0.0%
Total farm labor and propriet	services (00)	57.3	4%	57.3	601%	4.2%
Agriculture and forestry su	21.1	21.5	2%	0.3	4%	0.0%
Total Farm and Ag	21.1	78.7	6%	57.6	605%	4.2%
Total Familianu Ag	21.1	70.7	070	57.0	005%	4.270
Forestry and Dependent Indug	Services too) + S	Services too)	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Forestry and logging	-	-	0%	-	0%	0.0%
Agriculture and forestry su	21.1	21.5	2%	0.3	4%	0.0%
Paper manufacturing	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Wood product manufactur	1.1	1.1	0%	(0.0)	0%	0.0%
Total Forestry T	Total Forestry To	otal Forestry	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Transformative Excl ExtractivE	xcl Extractive Ex	ccl Extractive	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Forestry, fishing, related ac	22.3	22.7	2%	0.4	4%	0.0%
Fishing, hunting, and trapp	1.2	1.2	0%	0.0	0%	0.0%
Agriculture and forestry su	21.1	21.5	2%	0.3	4%	0.0%
Utilities	5.8	5.0	0%	(0.8)	-8%	-0.1%
Construction	35.7	38.7	3%	3.0	31%	0.2%
Manufacturing	94.4	87.0	6%	(7.4)	-77%	-0.6%
Durable goods manufactur	48.0	39.2	3%	(8.8)	-92%	-0.7%
Nonmetallic mineral produ	11.7	12.2	1%	0.6	6%	0.0%
Fabricated metal product	2.0	2.0	0%	(0.0)	0%	0.0%
Machinery manufacturing	0.6	0.6	0%	(0.0)	0%	0.0%
Computer and electronic p	#N/A	0.1	0%	#N/A	#N/A	#N/A
Electrical equipment and a	_	_	0%	-	0%	0.0%
Furniture and related prod	1.1	1.1	0%	0.0	0%	0.0%
Miscellaneous manufactu	2.5	2.5	0%	(0.0)	0%	0.0%
Nondurable goods manufa	46.4	47.8	3%	1.4	15%	0.1%
Food manufacturing	30.4	31.2	2%	0.8	8%	0.0%
Beverage and tobacco pro	_	_	0%	-	0%	0.0%
Apparel manufacturing	0.2	0.2	0%	0.0	0%	0.0%
Printing and related suppo	2.3	2.4	0%	0.1	1%	0.0%
Plastics and rubber produ	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Total Transformative Excl Ex E	xcl Extractive Ex	cl Extractive	#VALUE!	#VALUE!	#VALUE!	#VALUE!
			0%	-	0%	0.0%
Extractive	Extractive	Extractive	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Forestry and logging	-	-	0%	-	0%	0.0%
Mining	86.8	78.8	6%	(8.0)	-84%	-0.6%
Oil and gas extraction	#N/A	64.0	5%	#N/A	#N/A	#N/A
Mining (except oil and gas	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

#### **Data Sources**

Data for this profile were obtained from four sources:

- Regional Economic Information System (REIS CD-ROM) of the Bureau of Economic Analysis, U.S. Department of Commerce.
- Bureau of Labor Statistics, U.S. Department of Labor.
- County BU.S.iness Patterns, Bureau of the CensU.S., U.S. Department of Commerce.
- Bureau of CensU.S., U.S. Department of Commerce.

The Economic Profile System was designed to focus on long-term trends at the county level. We used this method and geographic scale for several reasons: (1) trend analysis provides a more comprehensive view of change than spot data for select years, (2) the most reliable information on long-term employment and income trends is available at the county level, and (3) communities within counties rarely function as economic units themselves. Finally, even though in many areas the most accurate geographic scale to understand economic changes may be at the multi-county or regional level, county-level data is useful in the context of existing political jurisdictions, such as county commissions and planning departments. The list below contains the World Wide Web sites and telephone numbers for the databases used in this report:

- Bureau of Economic Analysis: http://www.bea.doc.gov, Tel. 202-606-9600
- Bureau of Labor Statistics: http://stats.bls.gov:80/blshome, Tel. 202-606-5886
- Bureau of Census: http://www.census.gov, Tel. 303-969-7750
- Oregon State University, Government Information Sharing Project: http://govinfo.library.orst.edu; Tel. 541-737-4514.
- University of Virginia, Geospatial and Statistical Data Center: http://fisher.lib.virginia.edu; Tel. 804-982-2630

#### Use of Federal Rather than State Data Bases

Data from state agencies was not used for this profile. Many of the state and local sources of data do not include information on the self-employed or on the importance of non-labor income, such as retirement income and money earned from past investments. In many counties this can result in the underestimation of employment and total personal income by at least one third. The REIS disk of the Bureau of Economic Analysis contains the most robust data set and for this reason it was used as the primary source.

The only disadvantage of the REIS dataset is it's not as recent; 2002 is the latest for REIS, while state data sources provide data for as recent as 2003 and in some instances 2004. By providing long-term trends data, from 1970 to 2002, having the most recent data is less important than being able to discern where the county's economy has been, and the direction in which it has been headed in recent years.

#### The Standard Industrial Classification (SIC) System

Employment and income information is organized by the US Department of Commerce according to the Standard Industrial Classification (SIC) code. Industries are classified in broad categories (e.g., Farm), sub-categories (e.g., Agricultural production - crops), and progressively finer levels of detail (e.g., Ag. Production - cash grain). For a detailed description of SIC codesconsult *The Standard Industrial Classification Manual* (National Technical Information Service, order no. PB-100012, Tel. 703-487-4600).

#### **Services**

Since much of the growth in labor earnings in the U.S. economy over the last two decades has been in "services," it should noted that the term is defined in various ways by different researchers. Some economists define services broadly as "all output that does not come from the four goods-producing sectors: agriculture, mining, manufacturing, and construction."[1] The U.S. Department of Commerce defines services more narrowly as major groups 70-89 of the SIC code.[2] However, even their restricted classification includes a wide variety of sectors, ranging from hotels and lodging, and social services to business services, and engineering and management services.

[1] E. Ginzberg and G.J. Vojta. 1981. "The Service Sector in the U.S. Economy." Scientific American. 244 (3): 48-55.

[2] SIC codes 70-89 are: Hotels, Lodging and Other Places, Personal Services, Business Services, Auto Repair, Miscellaneous Repair Services, Motion Pictures, Amusement and Recreation Services, Health Services, Legal Services, Educational Services, Social Services, Museum Services, Museums, Botanical, and Zoological Services, Engineering and Management Services, Private Households, and Services Not Elsewhere Classified.

In this profile, we define services broadly as "Services and Professional" industries, and then also into categories -- such as producer, consumer, social and government services -- to gain a clearer picture of where service growth is taking place. We use the term "Services and Professional" to underscore an important point: service occupations are not just "hamburger flippers and maids," but rather consist of a combination of high-paying and low-paying professions, mixing physicians with barbers, and chambers maids with architects and financial consultants.

According to economist Lester Thurow, "Services is simply too heterogeneous to be an interesting category. The real issue is not the growth of services but whether the economy is making a successful transition from low-wage, low-skill industries ... to high-wage, high-skill industries."[1] One way to gauge this is to follow the long-term trends in average earnings per job.

#### A Transition from SIC system to NAICS: An Important Precaution on the Interpretation of Economic Trend Data.

The long-term historic industry data used in this profile are based on data that is organized by the U.S. Department of Commerce using the Standard Industrial Classification (SIC) system. In recent years, the Department of Commerce has reorganized economic data according to a new system, called the North American Industry Classification System (NAICS, pronounced "nakes"). County Business Patterns started organizing their data using new NAICS in 1998, Census in 2000, and the Regional Economic Information System (REIS) in 2001.

The NAICS system is an improvement to the SIC system in several ways: first, businesses that use similar processes to produce goods or services are classified together. Previously, under the SIC system, some businesses were classified on the basis of their production processes while others were classified under different principles, such as class of consumer. Second, NAICS is a flexible system that will be updated every five years in order to keep pace with changes in the economy. Third, the NAICS system recognizes the uniqueness and rising importa of the "information economy," and provides several new categories, such as cable program distributors and database and directory publishers. Finally, and perhaps the most useful, the NAICS system provides seven sectors to better reflect services-producing businesses that were previously combined into one generic SIC division (the Services division).

This new system allows the data user to differentiate more clearly between what was previously often lumped under the general heading of "services," into categories such as arts and entertainment; education; professional, scientific and technical services; health care and social assistance, among others.

Arguably the most important change of NAICS is the recognition of hundreds of new businesses in the economy. NAICS divides the economy into 20 broad sectors rather than the SIC's 10 divisions as seen in the table on the following page. Creating these additional sector-level groupings allows NAICS to better reflect key business activities, as well as chronicle their changes.

[1] Lester Thurow, The Future of Capitalism (New York: William and Morrow and Company), p. 71.

#### SIC Divisions vs. NAICS Sectors

SI	IC Divisions	N	AICS Sectors
•	Agriculture, Forestry, and Fishing	•	Agriculture, Forestry, Fishing and Hunting
•	Mining	•	Mining
•	Construction	•	Construction
•	Manufacturing	•	Manufacturing
•	Transportation, Communications, and Public Utilities	•	Utilities
		•	Transportation and Warehousing
•	Wholesale Trade	•	Wholesale Trade
•	Retail Trade	•	Retail Trade
			Accommodation and Food Services
•	Finance, Insurance, and Real Estate	•	Finance and Insurance
			Real Estate and Rental and Leasing
•	Services		Information
		•	Professional, Scientific, and Technical Services
		•	Administrative and Support and Waste
		•	Management and Remediation Services
		•	Educational Services
		•	Health Care and Social Assistance
		•	Arts, Entertainment, and Recreation
			Other Services (except Public Administration)
•	Public Administration	•	Public Administration
•	None (previously, categories within each division)	•	Management of Companies and Enterprises

#### Non-Labor Income

Non-labor income is a mix of Dividends, Interest, and Rent (money earned from past investments), and Transfer Payments (government payments to individuals). Private pension funds (e.g. 401(K) plans) are not counted as part of transfer payments.

Some data sources, such as "Section 202" data available from state unemployment insurance records and reported by the Bureau of Labor Statistics, do not report non-labor income. The Bureau of Economic Analysis (BEA), on the other hand, tracks non-labor income. In order to understand the actual growth (labor and non-labor) of personal income, the REIS/BEA data set must be used, and this is what was used for this profile.

#### **Disclosures**

Some data, such as employment and income figures in counties with small economies, are not available because of confidentiality restrictions order to protect information about individual businesses, data are sometimes suppressed or, in the case of the publication about individual businesses, data are sometimes suppressed or, in the case of the publication about individual businesses, data are sometimes suppressed or, in the case of the publication about individual businesses, data are sometimes suppressed or, in the case of the publication about individual businesses, data are sometimes suppressed or, in the case of the publication about individual businesses, data are sometimes suppressed or, in the case of the publication about individual businesses, data are sometimes suppressed or, in the case of the publication about individual businesses, data are sometimes suppressed or, in the case of the publication about individual businesses, data are sometimes suppressed or, in the case of the publication about individual businesses, data are sometimes suppressed or, in the case of the publication about individual businesses, data are sometimes suppressed or, in the case of the publication about individual businesses, data are sometimes suppressed or, in the case of the publication about individual businesses, data are sometimes suppressed or, in the case of the publication about individual businesses, data are sometimes suppressed or, in the case of the publication about individual businesses, data are sometimes suppressed or, in the case of the publication about individual businesses, data are sometimes suppressed or, in the case of the publication about individual businesses, data are sometimes are suppressed or an area of the publication about individual businesses, data are sometimes are suppressed or an area of the publication area of the public

In some of the profiles a few disclosure restrictions were encountered. Sometime *County Business Patterns* data was used to estimate data where disclosures exist in the REIS/BEA database. In other instances the missing data was left blank, particularly if doing so has little effect on the ability to discern long-term trends. In other cases, where data was missing for one or two years, a rolling average was used to estimate the data gaps. In each case where disclosures were estimated, annotations were made in the Excel files.

#### Adjustments from Current to Real Dollars

Because a dollar in the past was worth more than a dollar today, data reported in current dollar terms should be adjusted for inflation. The U.S. Department of Commerce reports personal income figures in terms of current dollars. All income data in this profile were adjusted to real (or constant) 2002 dollars using the Consumer Price Index, except the Income Distribution information on page 5 of the profile.

#### **Unemployment Rate**

Unemployment is generally available as seasonally unadjusted or adjusted, and there is an advantage to using adjusted data. From the Bureau of Labor Statistics web site (http://stats.bls.gov/lauseas.htm), an explanation of why adjusted figures should be used, whenever possible: "Over the year, the size of the Nation's labor force, the levels of employment and unemployment, and other measures of labor market activity undergo sharp fluctuations due to seasonal events including changes in weather, harvests, major holidays, and the opening and closing of schools. Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make it easier to observe the cyclical, long term trend, and other non-seasonal movements in the series."

Unadjusted numbers were used in this profile in order to obtain an annual average and because county-level data are not available in adjusted format from the Bureau of Labor Statistics web site. This may introduce some error in counties where the size of the workforce fluctuates seasonally, such as tourist destination areas.

#### Farm Income Footnote:

Note that farm income figures on pages 28, 30 & 31 are not the same. In brief, the figures on page 28 (see table) reflect income from farming *enterprises* (farm proprietors and corporate income), while the farm figure on pages 30 & 31(see table) indicates personal income earned by *individuals* (both proprietors, and wage and salary employees) who work in farming.

Note also that the term "farm" includes farming and ranching, but not agricultural services such as supplying soil preparation services and veterinary and other animal services – see table on page 9.

#### Farm income on page 28 is calculated as follows:

Total cash receipts and other income

less: Total production expenses

Realized net income

plus: Value of inventory change

Total net income including corporate farms

#### Farm income on pages 30 & 31 is calculated as follows:

Total net income including corporate farms

less: Net income of corporate farms

plus: Statistical adjustment

Total net farm proprietors' income

plus: Farm wages and perquisites

plus: Farm other labor income

Total farm labor and proprietors' income

#### **Specialization Index**

The specialization index was calculated as:

$$SPECIAL_{it} = \sum_{j=1}^{\infty} (EMP_{ijt}/EMP_{it})^{2}$$

SPECIAL<sub>it</sub> = specialization of economy in county i in year t

 $EMP_{ijt} = {\it employment in industry j in county i in year t}$ 

EMP<sub>it</sub> = total employment in county i in year t

n = number of industries

This index is commonly used as a measure of industrial specialization in the economy. Counties with a high specialization index can also be described as not being economically diverse.

#### Mean, Median and Modes

#### mear

The sum of a list of numbers, divided by the total number of numbers in the list.

#### median

"Middle value" of a list. The smallest number such that at least half the numbers in the list are no greater than it. If the list has an odd number of entries, the median is the middle entry in the list after sorting the list into increasing order. If the list has an even number of entries, the median is equal to the sum of the two middle (after sorting) numbers divided by two. The median can be estimated from a histogram by finding the smal number such that the area under the histogram to the left of that number is 50%.

#### mode

For lists, the mode is the most common (frequent) value. A list can have more than one mode. For histograms, a mode is a relative maximum ("bump").

#### Income:

- <u>Total Personal Income</u>= private earnings, income from government and government enterprises, dividends, interest, and rent, and transfer payments plus adjustments for residence minus personal contributions for social insurance.
- Wage and salary = monetary remuneration of employees, including employee contributions to certain deferred compensation programs, such as 401K plans.
- Other labor income = payments by employers to privately administered benefit plans for their employees, the fees paid to corporate directors, and miscellaneous fees.
- <u>Proprietors' income</u>= income from sole proprietorships, partnerships, and tax-exempt cooperatives. A sole proprietorship is an
  unincorporated business owned by a person. A partnership is an unincorporated business association of two or more partners. A taxexempt cooperative is a nonprofit business organization that is collectively owned by its members.

#### **Transfer Payments:**

- <u>Transfer payments</u> = payments to persons for which they do not render current services. As a component of personal income, they are payments by government and business to individuals and nonprofit institutions.
- Retirement & disab. insurance benefit payments Old-Age, Survivors, and Disability Insurance payments (Social Security), Railroad Retirement and Disability payments, Federal Civilian Employee & Disability Payments, Military Retirement, and State and Local Government Employee retirement payments.
- Medical payments= Medicare, public assistance medical care and CHAMPUS payments.
- <u>Income maintenance</u>(welfare) = Supplemental Security Income (SSI), Aid to Families with Dependent Children (AFDC), Food Stamps, and Other Income Maintenance Payments, such as emergency assistance, foster care payments and energy assistance payments.
- <u>Unemployment insurance benefit payments</u> unemployment compensation for state and federal civilian employees, unemployment compensation for railroad workers, and unemployment compensation for veterans.
- Veterans benefits= primarily compensation to veterans for their disabilities and payments to their survivors.
- <u>Federal education and training assistance</u>: Job Corps payments, interest payments on Guaranteed Student Loans, federal fellowship payments, and student assistance for higher education.
- Other government payments— compensation of survivors of public safety officers and compensation of victims of crime. In Alaska this ite includes Alaska Permanent Fund payments.
- <u>Payments to nonprofit institutions</u>= payments for development and research contracts. For example, it includes payments for foster home care supervised by private agencies.
- <u>Business payments to individual</u>s= personal-injury liability payments, cash prizes, and pension benefits financed by the Pension Benefit Guarantee Corporation.